

(a) a polypeptide having an amino acid sequence which has at least 90% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2;

(b) a polypeptide which is encoded by a nucleic acid sequence which
* hybridizes under medium stringency conditions with (i) the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, (ii) its complementary strand, or (iii) a subsequence of SEQ ID NO:1 which encodes a polypeptide fragment which has aminopeptidase activity, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 35% formamide; and

(c) a fragment of (a), (b), or (c), wherein the fragment has aminopeptidase activity;

wherein the polypeptide having aminopeptidase activity sequentially removes one amino acid residue at a time from the N-terminus of a peptide, polypeptide, or protein.

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131. The polypeptide of claim 130, comprising an amino acid sequence which has at least 90% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

132. The polypeptide of claim 131, comprising an amino acid sequence which has at least 95% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

133. The polypeptide of claim 132, comprising an amino acid sequence which has at least 97% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

* 134. The polypeptide of claim 130, comprising the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2 or a fragment thereof, wherein the fragment has aminopeptidase activity.

135. The polypeptide of claim 134, comprising the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

136. The polypeptide of claim 131, which is obtained from an *Aspergillus* strain.

137. The polypeptide of claim 136, which is obtained from an *Aspergillus oryzae* strain.

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138. The polypeptide of claim 130, which is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its complementary strand, or a subsequence thereof which encodes a polypeptide fragment which has aminopeptidase activity, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 35% formamide.

139. The polypeptide of claim 138, which is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1 or its complementary strand, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 35% formamide.

140. The polypeptide of claim 138, which is obtained from an *Aspergillus* strain.

141. The polypeptide of claim 140, which is obtained from an *Aspergillus oryzae* strain.

142. The polypeptide of claim 130, which is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its complementary strand, or a subsequence thereof which encodes a polypeptide fragment which has aminopeptidase activity, wherein medium stringency conditions are defined as

prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 50% formamide.

143. The polypeptide of claim 142, which is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1 or its complementary strand, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 50% formamide.

D 144. The polypeptide of claim 142, which is obtained from an *Aspergillus* strain.

145. The polypeptide of claim 144, which is obtained from an *Aspergillus oryzae* strain.

146. The polypeptide of claim 130, which is encoded by the nucleic acid sequence contained in plasmid pEJG18 which is contained in *E. coli* NRRL B-21677.

147. An isolated polypeptide having aminopeptidase activity with physicochemical properties of (a) a pH optimum in the range of from about pH 7.27 to about pH 10.95 determined at ambient temperature in the presence of Ala-para-nitroanilide; (b) a temperature stability of 90% or more, relative to initial activity, at pH 7.5 determined after incubation for 20 minutes at 60°C in the absence of substrate; and (c) an ability to hydrolyze a substrate containing Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Phe, Pro, Ser, Thr, Trp, Tyr, or Val at its N-terminus.

148. The polypeptide of claim 147, wherein the polypeptide has the ability to hydrolyze a substrate containing Ala, Glu, Gly, or Pro at its N-terminus.

149. The polypeptide of claim 147, which is obtained from an *Aspergillus* strain.

150. The polypeptide of claim 149, which is obtained from an *Aspergillus oryzae* strain.

151. A method for producing the polypeptide of claim 130 comprising (a) cultivating a strain to produce a supernatant comprising the polypeptide; and (b) recovering the polypeptide.

152. A composition comprising the polypeptide of claim 130 and a suitable carrier.

D 153. The composition of claim 152, wherein the polypeptide comprises an amino acid sequence which has at least 90% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

154. The composition of claim 153, wherein the polypeptide comprises an amino acid sequence which has at least 95% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

155. The composition of claim 154, wherein the polypeptide comprises an amino acid sequence which has at least 97% identity with the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

156. The composition of claim 152, wherein the polypeptide comprises the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2 or a fragment thereof.

157. The composition of claim 156, wherein the polypeptide comprises the amino acid sequence of amino acids 16 to 496 of SEQ ID NO:2.

158. The composition of claim 153, wherein the polypeptide is obtained from an *Aspergillus* strain.

159. The composition of claim 152, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic

acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its complementary strand, or a subsequence thereof which encodes a composition fragment which has aminopeptidase activity, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 35% formamide.

160. The composition of claim 159, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under medium stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1 or its complementary strand, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 35% formamide.

161. The composition of claim 159, wherein the polypeptide is obtained from an *Aspergillus* strain.

162. The composition of claim 152, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence of nucleotides 46 to 1488 of SEQ ID NO:1, or its complementary strand, or a subsequence thereof which encodes a composition fragment which has aminopeptidase activity, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 50% formamide.

163. The composition of claim 162, wherein the polypeptide is encoded by a nucleic acid sequence which hybridizes under high stringency conditions with the nucleic acid sequence nucleotides 46 to 1488 of SEQ ID NO:1 or its complementary strand, wherein medium stringency conditions are defined as prehybridization and hybridization at 42°C in 5X SSPE, 0.3% SDS, 200 µg/ml sheared and denatured salmon sperm DNA, and 50% formamide.

164. The composition of claim 162, wherein the polypeptide is obtained from an *Aspergillus* strain.

165. The composition of claim 162, wherein the polypeptide has physicochemical properties of (a) a pH optimum in the range of from about pH 7.27 to about pH 10.95 determined at ambient temperature in the presence of Ala-para-nitroanilide; (b) a temperature stability of 90% or more, relative to initial activity, at pH 7.5 determined after incubation for 20 minutes at 60°C in the absence of substrate; and (c) an ability to hydrolyze a substrate containing Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Phe, Pro, Ser, Thr, Trp, Tyr, or Val at its N-terminus.

166. The composition of claim 165, wherein the polypeptide has the ability to hydrolyze a substrate containing Ala, Glu, Gly, or Pro at its N-terminus.

167. The composition of claim 165, wherein the polypeptide is obtained from an *Aspergillus* strain.

168. The composition of claim 167, wherein the polypeptide is obtained from an *Aspergillus oryzae* strain.

169. The composition of claim 152, wherein the polypeptide is encoded by the nucleic acid sequence contained in plasmid pEJG18 contained in *E. coli* NRRL B-21677.

REMARKS

Claims 90-129 have been canceled. New claims 130-169 have been added to solely address the 35 U.S.C. § 112 rejections and not to avoid any prior art. New claims 130-169 are pending in the present application.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance.